REMARKS

This is a full and timely response to the outstanding non-final Office Action mailed July 3, 2007. Reconsideration and allowance of the application and pending claims are respectfully requested.

I. Drawings Objections

Figure 1 has been objected to under 37 C.F.R. § 1.83(a) for not showing every feature of the invention specified in the claims.

Applicant intended to submit a Replacement Sheet for Figure 1 in the previous Response, but inadvertently omitted it from the filing. To correct that oversight, Applicant submits the Replacement Sheet with the present Response. Applicant apologizes for the error.

II. Specification Objections

The title of the patent application has been objected to for containing the terms "methods" and "systems". Specifically, it is alleged that the terms "methods" and "systems" are "legal words" and therefore are inappropriate for the title of the patent application. Applicant disagrees.

First, unlike legalistic terms like "said" and "whereas," the terms "methods" and "systems" are not legal terms that should be avoided in the title of a patent application. Instead, those terms are merely words that describe the general nature of the inventions that are described and claimed by Applicant. Therefore, Applicant submits that the terms are not inappropriate for use in a patent application title.

Myriad evidence exists that the terms "methods" and "systems" are not inappropriate for use in a patent application or patent title. For example, the U.S. Patent and Trademark Office has already issued 42,187 patents in 2007 alone that include one or both of those terms. Indeed, the Yang and Lomas references applied by the Examiner against Applicant's claims include one or both of the terms "method" and "system." Therefore, it is clear that the use of those terms is ubiquitous in patent application and patent titles and certainly is not improper.

In view of the above, Applicant has declined to amend the title of the instant patent application to remove the terms "methods" and "systems". Applicant respectfully submits that title of the instant patent application is not objectionable, and therefore respectfully requests that the objection be withdrawn.

III. Claim Rejections - 35 U.S.C. § 112, Second Paragraph

Claim 10 has been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention. In particular, claim 10 is rejected for use of the term "small".

In response, Applicant notes that claim 10 does not, and never has, included the term "small". In view of that fact, Applicant respectfully submits that the rejection is unfounded. Therefore, Applicant respectfully requests that the rejection be withdrawn.

IV. Claim Rejections - 35 U.S.C. § 103(a)

As has been acknowledged by the Court of Appeals for the Federal Circuit, the U.S. Patent and Trademark Office ("USPTO") has the burden under section 103 to establish a *prima facie* case of obviousness by showing some objective teaching in the prior art or generally available knowledge of one of ordinary skill in the art that would lead that individual to the claimed invention. *See In re Fine*, 837 F.2d 1071, 1074, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir. 1988). The Manual of Patent Examining Procedure (MPEP) section 2143 discusses the requirements of a *prima facie* case for obviousness. That section provides as follows:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure.

In the present case, the prior art at least does not teach or suggest all of the claim limitations, and there is no suggestion or motivation in the prior art to modify the references to include those limitations.

A. Rejection of Claims 1-3 and 5-34

Claims 1-3 and 5-34 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over a book entitled "The Open View Framework" ("the Open View document") in view of *Yang* (U.S. Pat. No. 6,467,087). Applicant respectfully traverses.

1. Claims 1-3 and 4-7

Applicant's independent claim 1 provides as follows:

1. A method for facilitating installation of firmware on a printing device, the method comprising:

transmitting from a computer a notification that firmware is available for installation on a printing device;

receiving with the computer a firmware download request; and transmitting a firmware file directly to the printing device to enable installation of the firmware on the printing device.

In the Office Action, the Examiner highlights various aspects disclosed in the Open View document. The Examiner, however, fails to address the explicit limitations recited in claim 1. For example, the Examiner has not identified a disclosure in the Open View document of the action of transmitting a "notification that firmware is available for installation on a printing device". Although the Examiner correctly identifies that the Open View document generally mentions downloading of firmware, the Examiner has not identified any passage that describes the transmission of any "notification" that the firmware is available for installation, whether it be on a printing device or any other device for that matter.

Regarding the limitation "receiving with the computer a firmware download request", the Examiner admits that the Open View document fails to disclose such an action.

Turning to the last limitation of claim 1, namely "transmitting a firmware file directly to the printing device to enable installation of the firmware on the printing device", the Examiner again fails to identify a disclosure within the Open View document of Applicant's explicit claim limitation. In particular, the Examiner did not identify disclosure of transmitting a firmware file "directly" to a printing device to enable the device to install the firmware.

In view of the above, it is difficult to understand not only how the Open View document can be cited as a base reference in rejecting Applicant's claims under 35 U.S.C. § 103 but how the Open View document is even relevant to Applicant's claims.

Turning to the Yang reference, the Examiner alleges that the Yang reference as discloses a printing device requesting a firmware download. In particular, the Examiner alleges that such requesting is disclosed in lines 20-25 of the Yang reference. That portion of Yang's disclosure provides as follows:

The present invention provides a method for updating a printer firmware. Using the method, the users can self-update the firmware of the printer, which not only facilitates the users but the manufacturers.

Yang, column 2, lines 20-25. As can be readily appreciated from the above excerpt, Yang says nothing whatsoever of a printing device "requesting" a firmware download in column 2, lines 20-25.

As a further matter regarding claim 1, Applicant notes that the Examiner has not established that the Yang reference discloses either "transmitting from a computer a notification that firmware is available for installation on a printing device" or "transmitting a firmware file directly to the printing device to enable installation of the firmware on the printing device".

In view of the foregoing, it is clear that the Open View/Yang combination fails to teach or suggest <u>each</u> of the limitations of claim 1. Applicant therefore respectfully requests that the rejections to claim 1 and its dependents be withdrawn.

With particular regard to dependent claim 2, the Examiner has not cited any passage of the Open View document that discloses transmitting a notification "directly to the printing device". Indeed, as identified above, the passages identified by the Examiner do not even mention transmission of <u>any</u> notifications.

Regarding dependent claim 3, the Examiner has not cited any passage of the Open View document that discloses transmitting a notification "to the user". Indeed, as identified above, the passages identified by the Examiner do not even mention transmission of <u>any</u> notifications.

Regarding dependent claim 5, column 2, lines 20-25 of the Yang reference do not in fact mention any "firmware download request" being transmitted from a printing device, whether it be to a computer or human being.

Regarding dependent claim 6, pages 179-181 of the Open View document do not in fact describe transmitting a "remote firmware update (RFU) file" "directly to the printing device". First, there is no mention on those pages of a "remote firmware update (RFU) file". Indeed, those pages do not even discuss "firmware" at all. Second, no "printing"

device" is identified as the target system. Instead, the Open View document explicitly identifies personal computers as target systems. See Open View document, page 181.

Regarding dependent claim 7, page 68 of the Open View document does not in fact disclose "registering" a "printing device" with a "firmware service" or "determining whether to transmit a notification" based on the information collected through the registration. First, although "collecting data" is mentioned on page 68, such mere mention of data collection can hardly be considered to constitute a disclosure of "registering" as the term used in Applicant's claims and described in Applicant's specification, which must be used when interpreting Applicant's claims. Second, there is no disclosure on page 68 of collecting such data from a "printing device". Third, there is no mention on page 68 of a "firmware service". Fourth, pages 76-79 do not describe transmission of a notification that firmware is available. Instead, described is receiving a notification from an operator that there is a problem. See Open View document, page 76.

2. Claims 8-12

Applicant's independent claim 8 provides as follows:

8. A system for facilitating installation of firmware on a printing device, the system comprising:

means for transmitting a notification to a device indicating that new firmware is available for installation on the printing device;

means for receiving a firmware download request; and means for transmitting a firmware file directly to the printing device.

Regarding independent claim 8, neither the Open View document nor the Yang reference teaches or suggests any of "means for transmitting a notification to a device indicating that new firmware is available for installation on the printing device", "means for receiving a firmware download request", or "means for transmitting a firmware file directly to the printing device" at least for the same reasons stated above in relation to claims 1 and 2. Applicant therefore respectfully requests that the rejections to claim 8 and its dependents be withdrawn.

With particular regard to dependent claims 9, 10, 11, and 12, Applicant refers to and incorporates Applicant's comments provided above in relation to dependent claims 2, 4, 6, and 7, respectively.

3. Claims 13-19

Applicant's independent claim 13 provides as follows:

13. A method for facilitating installation of firmware on a printing device, the method comprising:

a printing device receiving a firmware availability notification; and the printing device providing a related notification to a user.

Regarding independent claim 13, Applicant notes that neither the Open View document nor the Yang reference teaches or suggests "a printing device receiving a firmware availability notification". Applicant notes that the Examiner failed to address that limitation in discussing claim 13. Applicant presumes that the Examiner relies upon the Open View document as disclosing that limitation. As noted above, however, the

passages of the Open View document cited by the Examiner in relation to claim 1 do not describe any "notification" as to the availability of firmware.

Regarding the limitation "the printing device providing a related notification to a user", Applicant respectfully submits that the Examiner's use of Office Notice is unfounded. Specifically, the Examiner has not established to the satisfaction of the Applicant that it is unquestionably well known that "audible sounds" are used by printing devices to provide a notification related to firmware availability. Therefore, Applicant requests documentary evidence that proves that it is in fact well known for a printing device to provide that type of notification. See MPEP § 2144.03. Presumably, if such a notification from a printing device is so well known, the Examiner should have no difficulty in providing such evidence.

With particular regard to dependent claim 14, column 2, lines 39-43 of the Yang reference do not in fact disclose a printing device "posting a notification on a network page using a network server embedded in the printing device". First, the "downloader" described by Yang in column 2 is not described as being present on a printing device. To the contrary, it appears that the downloader is provided on a client computer. Second, column 2, lines 39-43 of the Yang reference do not mention a printing device having an embedded network server. Indeed, no "server" is even mentioned in that portion of the Yang reference.

Regarding dependent claim 15, column 2, lines 20-25 of the Yang reference do not in fact disclose a printing device "transmitting a message to a user computing device". Applicant has reproduced that portion of the Yang reference above.

Regarding dependent claim 16, neither the Open View document nor the Yang reference disclose a printing device displaying a notification *related to firmware availability* in a display of the printing device. Column 2, lines 20-25 of the Yang reference, which have been reproduced above, make no mention of such an action.

Regarding dependent claim 17, the Open View document does not in fact disclose a printing device "receiving a request to install available firmware". Applicant notes that the Examiner has not identified with specificity the particular portion of the Open View document that is believed to comprise that disclosure.

Regarding dependent claim 18, neither the Open View document nor the Yang reference disclose a printing device "transmitting a firmware download request to a firmware service". Regarding the Open View document, Applicant notes that the Examiner has not identified with specificity the particular portion of the Open View document that is believed to comprise that disclosure. Regarding the Yang reference, column 2, lines 20-25 of the Yang reference says nothing about a printing device "transmitting" such a request.

Regarding dependent claim 19, block 206 of Figure 2 of the Yang reference does not in fact disclose a printing device "receiving a firmware file and installing the firmware file on the printing device". Instead, only disclosed is the action of "writing" firmware into nonvolatile memory.

4. Claims 20-24

Applicant's independent claim 20 provides as follows:

20. A system for facilitating installation of firmware on a printing device, the system comprising:

means provided on a printing device for receiving a notification from a firmware service that new printing device firmware is available for download; and

means provided on the printing device for providing a related notification to a device user.

Regarding independent claim 20, neither the Open View document nor the Yang reference teaches or suggests "means provided on a printing device for receiving a notification from a firmware service that new printing device firmware is available for download" or "means provided on the printing device for providing a related notification to a device user" at least for reasons described above in relation to claim 13. Applicant therefore respectfully requests that the rejections to claim 13 and its dependents be withdrawn.

With particular regard to dependent claims 21, 22, 23, and 24, Applicant refers to and incorporates the comments provided above in relation to dependent claims 14, 18, 16, and 19, respectively.

5. Claims 25-28

Applicant's independent claim 25 provides as follows:

25. A computer-readable medium that contains a firmware service, the service comprising:

logic configured to transmit firmware availability notifications directly to printing devices;

logic configured to receive firmware download requests from the printing devices; and

logic configured to transmit firmware files directly to the printing devices.

Regarding independent claim 25, neither the Open View document nor the Yang reference teaches or suggests any of "logic configured to transmit firmware availability notifications directly to printing devices", "logic configured to receive firmware download requests from the printing devices" or "logic configured to transmit firmware files directly to the printing devices" for reasons described above. Applicant therefore respectfully requests that the rejections to claim 25 and its dependents be withdrawn.

With particular regard to dependent claims 26, 27, and 28, Applicant refers to and incorporates the comments provided in relation to dependent claims 6, 7, and 7, respectively.

6. Claims 29-34

Applicant's independent claim 29 provides as follows:

29. A printing device, comprising: memory including:

logic configured to directly receive firmware availability notifications that are transmitted by a firmware service via a network; and logic configured to provide related notifications to a user.

Regarding independent claim 29, neither the Open View document nor the Yang reference teaches or suggests either of "logic configured to directly receive firmware availability notifications that are transmitted by a firmware service via a network" or "logic configured to provide related notifications to a user" at least for reasons described above. Applicant therefore respectfully requests that the rejections to claim 29 and its dependents be withdrawn.

With particular regard to dependent claims 30, 31, 32, 33, and 34, Applicant refers to and incorporates the comments provided in relation to dependent claims 14, 3, 16, 1, and 19, respectively.

B. Rejection of Claim 4

Claim 4 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over *HP and PTR* as applied to claims 1-3 and 5-31, in view of *Lomas* (U.S. Pat. No. 6,424,424). Applicant respectfully traverses the rejection.

As identified above, the Open View document and Lomas do not teach aspects of Applicant's claims. Applicant respectfully submits that claim 4 is allowable for at least the same reasons that claim 1 is allowable over the Open View document and the Lomas reference.

As a further matter, Applicant notes that the Examiner has not properly identified what the "PTR" reference is. Applicant further notes that such document was not in fact "applied to claims 1-3 and 5-31." Applicant therefore submits that a prima facie case of obviousness has not been made as to claim 4 and requests clarification.

CONCLUSION

Applicant respectfully submits that Applicant's pending claims are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

Respectfully submitted,

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